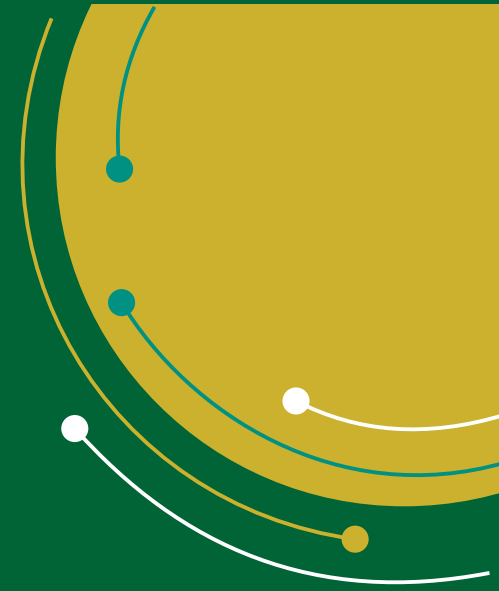
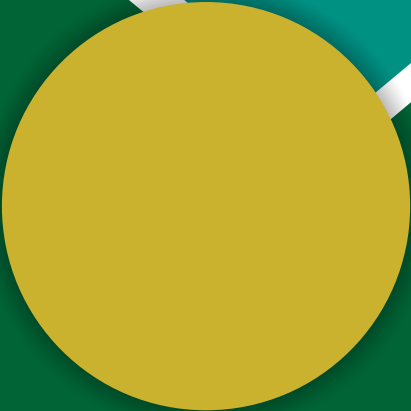


Biostimulant Based Liquid Fertilizer for High Fertilizer Use Efficiency and Crop Yields



Muhammad Yaseen

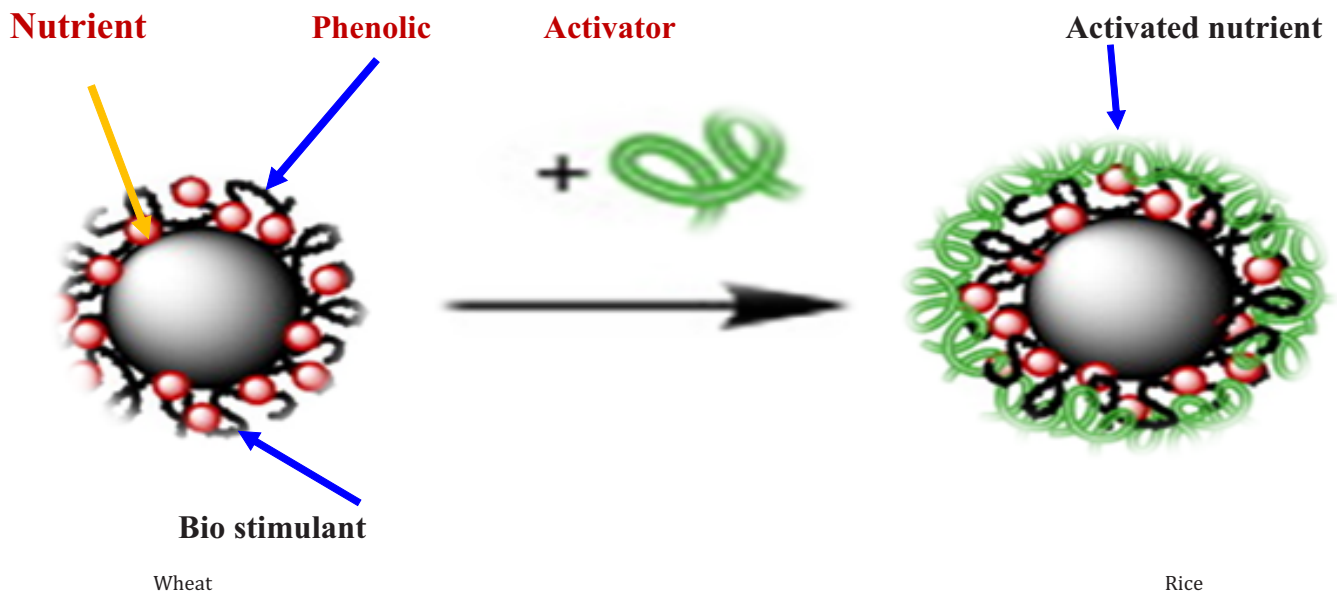
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Nutrient deficiencies and nutrient imbalances occur due to low organic matter and alkaline calcareous nature of Pakistani soils. These factors reduce availability of nutrients in soil, which results in low use efficiency of applied fertilizers and reduction in crop yields. The situation demands to develop innovative fertilizer product decorated with some nutrient activators to keep nutrient available. A phenolic and activator based liquid fertilizer containing 8-8-15% NPK

has been developed. It works as a fertilizer supplement and improves efficiency of soil applied fertilizers. When this product is supplemented with soil applied fertilizers, it not only keeps nutrients in available form for longer periods but also makes easy access of plant roots for absorption.

Three liters of liquid fertilizer are applied with 1st irrigation and 2nd application is done one month after the first application. Two applications are sufficient for wheat, rice, maize and vegetable crops while for sugarcane and orchards, three applications are recommended. **Activator** Application of this fertilizer with recommended rates of fertilizers boosts up the crop yield up to 30% by improving tillering, seed setting and providing protection against most of the biotic (some soil borne diseases & insect attacks) and a-biotic stresses (temperature and moisture stresses). The product is getting attention of farmers of the Punjab, Sindh and KPK. The product is sold by Patron Chemicals Multan who developed this product with our consultancy.



Check Plot

Treated Plot



Check Plot



Treated Plot